**IN THE CLAIMS:**

1. (Original) A wide-angle imaging assembly comprising a main lens produced from an aspheric optical block, said aspheric optical block having:

a. a vertical axis of symmetry;

b. a transparent upper surface, at least part of which is capable of reflecting rays that impinge upon it from the inner side of said optical block;

c. a transparent perimeter surface; and

d. a transparent lower surface;

wherein the fabrication material of said optical block is selected to enable optical transmittance of a specific spectral range; and wherein light rays in the specific spectral range originating in a first scene having a 360 degrees panoramic perimeter are refracted by said transparent perimeter surface, enter said optical block, are then reflected by said upper surface towards said transparent lower surface, are then refracted by said transparent lower surface, and exit through said transparent lower surface.

2. (Original) A wide angle imaging assembly according to claim 1, wherein the upper surface is at least partially, axi-symmetrically coated with reflective material on its exterior side, thus causing reflection of light rays that impinge upon it from the inner side of the optical block.

3. (Original) A wide angle imaging assembly according to claim 2, wherein the reflective material that coats the upper surface is selected to enable reflection of light rays in the specific spectral range transmitted by the material of the optical block.

4. (Original) A wide angle imaging assembly according to claim 1, further comprising a transparent area in a part of the upper surface around the vertical axis of symmetry, enabling light from a second scene, located at least partially above the first scene, to pass through said transparent area and travel through the optical block and exit said block.

5. (Original) A wide angle imaging assembly according to claim 4, wherein the curvature of the surface of the transparent area is different than the curvature of the remainder of the upper surface.

6. (Currently amended) A wide angle imaging assembly according to claim 4, wherein the lower surface is described by two different axi-symmetric ~~curves.~~ curves.

7. (Original) A wide angle imaging assembly according to claim 4, wherein the transparent area is fabricated as a hole extending along the vertical axis of symmetry.

8. (Original) A wide angle imaging assembly according to claim 7, wherein the hole extends from the upper surface to the lower surface.

9. (Original) A wide angle imaging assembly according to claim 8, wherein the shape of the hole is conical.

10. (Original) A wide angle imaging assembly according to claim 7, further comprising an optical structure placed within the hole; said optical structure designed to

enhance or correct light rays coming from the second scene.

11. (Original) A wide angle imaging assembly according to claim 10, wherein the optical structure placed within the hole comprises a plurality of optical components.

12. (Original) A wide angle imaging assembly according to claim 4, further comprising an optical structure located above the transparent area and coaxially with it; said optical structure designed to enhance or correct light rays coming from the second scene or enlarge the aperture of said second scene.

13. (Original) A wide angle imaging assembly according to claim 12, wherein the optical structure located above the transparent area comprises a plurality of optical components.

14. (Original) A wide angle imaging assembly according to claim 1, further comprising:

a. a hole which is conically shaped, extending along the vertical axis of symmetry from the upper surface to the lower surface; and

b. a black cone compatibly shaped to be placed inside said hole,

wherein said cone is designed to prevent glare.

15. (Original) A wide angle imaging assembly according to claim 1, further comprising a holding element, fabricated together with and a part of the optical block, said

holding element located adjacent to the lower surface and extending downwards, wherein said holding element does not interfer with or block the rays that exit from said lower surface.

16. (Original) A wide angle imaging assembly according to claim 15, wherein the holding element is shaped as a tube made of an optically transparent material.

17. (Original) A wide angle imaging assembly according to claim 15, further comprising a mechanical connector having a first edge and a second edge; where said first edge of said connector is designed to connect to the holding element.

18. (Original) A wide angle imaging assembly according to claim 17, wherein the second edge of the connector is designed to connect to an image capture device, positioning said image capture device coaxially with the optical block, facing the lower surface of said block.

19. (Original) A wide angle imaging assembly according to claim 17, wherein the mechanical connector further comprises optical lenses positioned coaxially with the optical block and designed to enhance the quality of the images exiting the lower surface of said optical block.

20. (Original) A wide angle imaging assembly according to claim 17, wherein the second edge of the connector is designed to connect to an illumination source, positioning said illumination source adjacent to the exterior edge of the holding element.

21. (Original) A wide angle imaging assembly according to claim 18, further comprising an image capture device designed to capture images that arrive from the optical block, wherein the spectral range to which said image capture device is sensitive, is at least partially identical to the specific spectral range to which the optical block is transparent.

22. (Original) A wide angle imaging assembly according to claim 20, further comprising an illumination source that distributes illumination rays, which travel through the holding element and are distributed by the surfaces of the optical block, wherein the wavelength of said illumination source is within the range of the specific spectral range to which said optical block is transparent.

23. (Original) A wide angle imaging assembly according to claim 22, comprising a plurality of illumination sources, capable of emitting more than one wavelength, wherein all of said illumination wavelengths are within the specific spectral range to which the optical block is transparent.

24. (Currently amended) A wide angle imaging assembly according to claim 1, further comprising:

a. an axi-symmetric lens, capable of ~~reflecting~~ refracting a second panoramic scene, which is at least partially included in the first scene; said axi-symmetric lens being positioned coaxially with and above the optical block;

b. a hole extending along the vertical axis of symmetry of said optical block;

c. an optical assembly located within said hole, said optical assembly comprising at

least a prism or reflective surface designed to refract or reflect light rays that are reflected by said axis-symmetric lens; and

d. a compatibly positioned image capture device,

wherein said axi-symmetric lens is capable of transmitting light rays in a second spectral range which is at least partially different than the specific spectral range to which said optical block is transparent; said optical assembly does not interfere or block the rays reflected from said optical block; and said first panoramic scene provided by said optical block in said specific spectral range is at least partly identical to the panoramic scene provided by said axi-symmetric lens in said second spectral range.